

P0581: CRUISE CONTROL MULTI-FUNCTION INPUT A CIRCUIT HIGH

OVERVIEW

Severity	:	<div><div>Medium</div></div>
DIY Difficulty Level	:	<div><div>Intermediate</div></div>
Repair Cost	:	\$150-\$250
Can I Still Drive?	:	Yes

What Does The P0581 Code Mean?

Cruise control was developed with our comfort in mind. It's sole purpose is to maintain a vehicle speed set by the operator manually (via steering wheel buttons, multifunction (i.e. signal lights, cruise, wipers, etc.) switch mounted to the steering column, etc.)

Meanwhile, the operator no longer has to control the gas pedal and if the vehicle is equipped with an automatic transmission (A/T), it may also control and adjust shift points according to real-time driving conditions' demands.

Generally speaking here, this code would make me believe we are talking about the multifunction switch on your steering column. That said, location possibilities vary significantly between manufacturers so, research accordingly.

The cruise control button would be a good place to start to narrow down locations. This code refers to a specific input circuit within the cruise control system. To determine which wire/circuit to focus on, refer to the service manual, letters in codes can and will be your best reference as far as pinpointing what wire/ circuit you are trying to diagnose/test.

When there is a fault within the cruise control multi-function "A" input circuit, the engine control module (ECM) proactively illuminates the instrument cluster with P0581 and related codes ([P0564](#), [P0578](#), [P0579](#), [P0580](#), and [P0581](#)).

As far as the letter “A” goes here, it could be to distinguish a connector, wire, circuit group, etc. That said, the manufacturer’s specifications is the best resource you could have for this.

The code P0581 is set by the ECM when there is a detected high electrical value within the “A” cruise control multi-function input circuit.

What Are The Symptoms Of The P0581 Code?

Symptoms of a P0581 trouble code may include:

- Abnormal vehicle speeds with cruise control active
- Cruise control inoperative
- Cruise control light illuminated regardless of switch position
- Cannot set cruise control to desired speed

What Are The Potential Causes Of The P0581 Code?

Causes for this P0581 code may include:

- Multi-function/Cruise control switch defective (i.e. stuck, broken, missing, etc.)
- Wring problem (e.g. chafing on steering column/dash parts, water intrusion, corrosion etc.)
- Connector malfunction (e.g. corroded pins, broken plastic tabs, swollen connector body, etc.)
- Fluids/dirt/grime in cruise control button/switch causing abnormal mechanical operation
- ECM issue (e.g. water intrusion in computer body, internal short, internal overheating, etc.)

How Can You Fix The P0581 Code?

Basic Step #1

Once your vehicle’s Multi-function/Cruise control switch is located, visually inspect it for any kind of contamination. It is very easy for plastic buttons/switches to get dirty/greasy/sticky causing them to malfunction and/or operate abnormally. Make sure that the mechanical operation of the switch is seamless and smooth. Any problem here should be addressed immediately.

If your particular scan tool/OBD reader has the capabilities, feel free to observe the electronic operation of the switch through DATA STREAM (the mode name here varies between readers but the important part is to find a mode to observe data real-time).

TIP: Be sure to avoid spraying any cleaning solutions directly to the button. Lightly dampen a clean rag with either water, soap & water, dash cleaner, etc. and carefully remove the debris from the switch’s crevices. An air powered blow gun will aid in removing debris without worsening the situation.

Basic Step #2

To access the connectors and harnesses involved within the cruise control/multi-function switch input circuit, you may need to remove some dash plastic/shrouds. Be delicate whenever working with plastic. comfortable room temperatures always help with the ease of dash/interior plastic disassembly/assembly.

If you can easily access the connector, you may be able to apply specific troubleshooting steps provided by your service manual. Switch testing will most likely involve recording electrical values using your multimeter. This may include operating the switch while recording and/or static testing. Refer to the specific make and model's service manual for "diagnostic flow chart".

Basic Step #3

A problem within the ECM is, most times, the last resort in diagnosis. Given the fact that it may be one of the most expensive electronic repairs you could do on your vehicle, leave this to the professionals.

Severity Description

Low severity for almost any cruise control fault, that said there are many exceptions. For the most part though, this fault should not be any cause for serious concern. That said, when it comes to electrical issues, they usually get worse over time. The majority of time, this fault will be moderately affordable to fix.

Obviously, this is highly subjective, so make sure to shop around for best prices and get multiple quotes/diagnosing strategies, who knows, work orders alone may help you in pinpointing what you are working with. Always stay on top of general vehicle maintenance.

Reference Sources

[P0581 Cruise Control Multi-Function Input A Circuit High](#), OBD-Codes.